

Glossary

Appendix A

THE GCCS-JOPES GLOSSARY

The following acronyms, abbreviations, and terms are used in this document or may be used in JOPES:

Terms

AAFIF	APOINTS batch transaction files are submitted in either JRS format or Automated Air Facilities Information File (AAFIF) format.
Base Complex	A group of geographically related installations mutually supportive of a single operational mission.
BCN	Base Complex Number.
Browser	A program to process and display HTML files.
Click/Clicking	Press/pressing the left mouse button to select or activate the object pointed to by the mouse pointer.
Client	A computer that uses the services of a server computer.
Cycle	Includes everything since Network was last performed.

DIA & CNO	SEAPORTS File batch transaction files are submitted in either Defense Intelligence Agency (DIA) format, or both DIA and Chief of Naval Operations (CNO) format.
Export	Presents the application's output and exports it to the JOPES Core database.
File	Loads, saves, or deletes all or portions of a LOGSAFE session. (A single user using LOGSAFE to generate requirements for a specific OPLAN.)
Generate	Generates requirements and NURCs (through the use of internal LOGSAFE models.) If appropriate, includes data from JEPES and MEPES imported in the second procedure.
Dependent / Independent	JEPES tables either OPLAN-specific (dependent) or not (independent).
Double-clicking	Pressing the left mouse button twice in rapid succession to activate the object pointed to by the mouse pointer.
Import	Imports data from the JEPES and MEPES applications.
JRS	Joint Reporting Structure (details format for contents of batch input files).
Nicknames	One JEPES table has "nicknames" -- for example, deployed_eng_sensitive_unit is commonly referred to as the "troop" table.

Rebasing	Occurs when the user updates the base_complex and base_location tables, which also causes updates to the base_fac_constr_policy and backup_supply tables.
Reports	Provides screen and hard copy reports of LOGSAFE input and parameters.
Server	A computer that provides files, programs, or services to other computers or to users
Setup	Prepares data that the application needs to function. Three separate activities; create, modify, validate are contained here.
Status	Determines the readiness of the application for use and provide a summary of activities that updated the JOPES Core database.
uudecode	A program that decodes ASCII data created by the uuencode program and converts it back to binary data.
uuencode	A program that encodes binary files as ASCII data so that they may be transmitted across ASCII connections.

Acronyms

ADP	Automated Data Processing
AHQ	Ad Hoc Query
a.k.a.	also known as
ALD	Available to Load Date
AMC	Air Mobility Command
AOR	Area of Responsibility
APF	Afloat Prepositioned Forces
APOD	Aerial Port of Debarkation
APOE	Aerial Port of Embarkation
APORTS	Aerial Ports and Air Operating Bases
ASSETS	Transportation Assets
AUTH	Authorized
BBLD/CBBLs	Barrels/Hundreds of Barrels
BULK	Bulk cargo
C4I	Command, Control, Communications, Computers, and Intelligence
CAP	Crisis Action Planning
CBBLs	Hundreds of barrels (POL)
CCB	Configuration Control Board
CCC	Cargo Category Code
CEI	Critical Employment Indicator
CESP	Civil Engineering Support Plan
CFSW	Center for Software (DISA)
CHSTR	Characteristics of Strategic Transportation Resources
CIN	Cargo Increment Number
CINC	Commander-in-Chief
CLASS	Classification
CM	Configuration Management
CNCC	Country Name/Country Code
COA	Course of Action
CONFIG	Configuration

CONOP	Concept of Operation
CONPLAN	Contingency Plan
CONST	Constraint
CONUS	Continental United States
COTS	Commercial Off-the-Shelf
CPE	Conventional Planning and Execution
CRD	CINC's Required Date
CRDD	CINC Required Delivery Date
CT	Country
DART	Dynamic Analysis and Replanning Tool
DB	Database
DBMS	Database Management System
DEST	Destination
DISA	Defense Information Systems Agency
DISCH	Discharge
DIV	Division
DoD	Department of Defense
DSSO	Defense Systems Support Organization
DTG	Date-Time-Group
EAD	Earliest Arrival Date
ECP	Engineering Change Proposal
EDC	Earliest Date of Completion (of loading)
EDD	Earliest Delivery Date, Estimated Departure Date
EIC	Equipment Identification Code
ESI	External Systems Interfaces
EVAC	Evacuation File Maintenance and Retrieval System
FAD	Feasible Arrival Date, Force Activity Designator
FAPES	Force Augmentation Planning and Execution System
FDESC	Force Description
FIC	Force Indicator Code
FM	Force Module, Field Manual

FM EDIT	Force Module Editor
FMID	Force Module Identification
FMS	Force Module Subsystem
FRAG	Fragmentation Code
FRAS	Fuel Resource Analysis System
FREF	Force Record Extraction File
FRN	Force Requirement Number
GCCS	Global Command and Control System
GEO	Geographic
GEOFILE	Geographic Location File
GEOLOC	Geographic Location Code
GSORTS	Global Status of Resources and Training System
GSPR	Global System Problem Report
GTN	Global Transportation Network
GUI	Graphical User Interface
HT	Height
HTML	HyperText Markup Language
Httpd	HyperText Transfer Protocol “D”
IBM	International Business Machines
ICAO	International Civil Aviation Organization
ID	Identification
ILOC	Intermediate Location
IMRAS	Individual Manpower Requirements and Availability System
IMS	Information Management System
INST	Installation
INT	Intermediate Stop
IOC	Initial Operating Capability
IRC	Internet Relay Chat
IRM	Information Resource Management
JCS	Joint Chiefs of Staff
JEPES	Joint Engineer Planning and Execution System

JIEO Organization	Joint Interoperability and Engineering
JISC	Joint Information Service Center
JFAST	Joint Flow and Analysis System for Transportation
JMAS	Joint Mission Application Systems
JOPES	Joint Operation Planning and Execution System
JOPS	Joint Operation Planning System
JOPSREP	Joint Operation Planning System Reporting Structure
JPEC	Joint Planning and Execution Community
JRIS	Joint Reconnaissance Information System
JS	Joint Staff
JSIT	JOPES Information Trace
JSPS	Joint Strategic Planning System
JTF	Joint Task Force
LAD	Latest Arrival Date
LAN	Local Area Network
LCN	Load Classification Number
LERTCON	Alert Conditions File
LFF	Logistics Factors File
LGTH	Length
LOGSAFE	Logistics Sustainment Analysis and Feasibility Estimator
LSA	Logistics Support Analysis
MB	Megabytes
MEPES	Medical Planning and Execution System
MILSTAMP	Military Standard Transportation and Movement Procedures
MODE	Transportation Mode
MSC	Military Sealift Command
MTMC	Military Traffic Management Command
MTON	Measurement Ton
MWF	Medical Working File

NAT	Non-Air Transportable
NBR	Number
NCA	National Command Authority
NEO	Noncombatant Evacuation Operations
NICKA	Codeword, Nickname and Exercise Term System
NPE	Nuclear Planning and Execution
NRG	Notional Requirements Generator
NSD	National Security Directive
NSR	National Security Review
NURC	Nonunit Related Cargo
OJCS	Organization of the Joint Chiefs of Staff
OPLAN	Operation Plan
OPORD	Operation Order
ORG	Organization
OUT	Oversized Cargo
OVER	Oversized Cargo
PAR	Population at Risk
PAX	Passengers
PC	Personal Computer
PERS	Personnel
PFF	Planning Factor File
PI	Plan Information
PIC	Parent Indicator Code
PID	Plan Identification
PIF	Problem Indicator Flag
PIN	Personnel Increment Number
POC	Point of Contact
POMCUS	Prepositioned Organizational Materiel Configured in Unit Sets
POD	Port of Debarkation
POE	Port of Embarkation
POL	Petroleum, Oils, and Lubricants
PORTS	Port Characteristics
POS	Port of Support

POSF	Ports of Support File
PROVORG	Providing Organization
PWRMS	Prepositioned War Reserve Materiel Stocks
RAM	Random Access Memory
RDA	Requirements Development and Analysis
RDD	Required Delivery Date
REQID	Requirement Identification
RFA	Reference File Administration
RLD	Ready to Load Date
RN	Rapid Navigation
ROC	Required Operational Capability
RSV	Reserve
RUM	Resource and Unit Monitoring
SA	System Administrator
S&M	Scheduling and Movement
SDF	Standard Distance File
SEQ#	Sequence Number
SIOP	Single Integrated Operation Plan
SIPRNet	Secret Internet Protocol Router Network
SORTS	Status of Resources and Training System
SPOD	Seaport of Debarkation
SPOE	Seaport of Embarkation
SQFT	Square Feet
SQL	Structured Query Language
SRF	Standard Reference File
SSF	Schedule Status Flags
ST	State
STON	Short Ton
SUM	Software User Manual
TBP	To Be Published
TCC	Transportation Component Command
TCP/IP	Transmission Control Protocol/Internet Protocol
TE	Transaction Editor

Telnet	Telecommunications Network
TFE	Transportation Feasibility Estimator
TLCF	Teleconferencing
TOTPOP	Total Population
TPFDD	Time-Phased Force and Deployment Data
TPFDL	Time-Phased Force and Deployment List
TPTRL	Time-Phased Transportation Requirements List
TUCHA	Type Unit Characteristics
TUDET	Type Unit Equipment Detail
TW/AA	Tactical Warning and Attack Assessment
UCFF	Unit Type Code Consumption Factor File
UI	Unit Information
UIC	Unit Identification Code
ULC	Unit Level Code
ULN	Unit Line Number
USACOM	United States Atlantic Command
USCENTCOM	United States Central Command
USERID	User Identification
USEUCOM	United States European Command
USFORSCOM	United States Forces Command
USPACOM	United States Pacific Command
USSOCOM	United States Special Operations Command
USSOUTHCOM	United States Southern Command
USSPACECOM	United States Space Command
USSTRATCOM	United States Strategic Command
USTRANSCOM	United States Transportation Command
USTC	United States Transportation Command
UTC	Unit Type Code
WAN	Wide Area Network
WIDTH	Width
WT	Weight
WWMCCS	Worldwide Military Command and Control System
WWW	Worldwide Web

xrn

X Read News

Communications

Appendix B

Note to JOPES Users:

GCCS Teleconferencing instructions are included in this document to provide the JOPES users with additional useful information and to further assist in the execution of their functions. This appendix contains a shortened version of the “How To” instructions for Chat and Newsgroups as found in the Teleconferencing User’s Manual, GCCS Version 2.1 dated 22 January 1996. No attempt was made to alter its format to conform to the rest of this document for two reasons: subsequent updates will be easy to incorporate as is and the current format very closely parallels that of this document.

“How to” Steps for TLCF (NEWS):

This is an extract from Section 3.0 of the Teleconferencing User’s Manual. The format has been left as it generally appears in the aforementioned document, (i.e., paragraph numbering remains).

3.0 USENET NEWS (NEWSGROUPS)

Usenet News (Newsgroups) is a bulletin-board style application for making announcements and holding extended conversations between users. It is implemented as a network of news servers that pass articles between each other. Articles are accessed via client software that the user executes locally (i.e., on the computer that he or she is logged onto).

The user has two client programs available for Newsgroups:

- xrn
- tin

Both launch icons are labeled ReadNews, but the xrn icon has an “X” in it (X-based readnews) while tin has the word “text” in its icon (text-based readnews).

This section describes the basic user operations available in xrn and tin (read news article, post articles, subscribe to newsgroups, etc). UNIX-style man pages for each of these programs are supplied with their segments.

3.1 Overview of Newsgroups

A Newsgroups article is a text file that is distributed between the news servers and then made available to users reading that particular newsgroup. The format of an article is a header followed by an empty line, then the article body. Figure 3-1 contains a sample article. (The header of the article consists of the lines with the format “header-type: header-value.”) The header of an article is used to:

- Identify the article.
- Determine where to transmit an article.
- Determine in which newsgroups the article is to appear.

The body of an article can contain any text the user wants (including empty lines). In the example in Figure 3-1, the article was posted to the newsgroup “test” with the subject “testing again.”

3.1.1 Connecting to a News Server. When a user double-clicks on the launch icon for either xrn or tin, a menu of up to five news servers available to connect to is displayed. A newsreader program must connect to a news server chosen from the menu to allow the user to view articles or submit articles to the GCCS News network. The news servers listed in the menu comprise servers to which the user has connected in the past, and servers the segment installer specified as usable by the local news-reading community.

If the server to which the user wants to connect is not listed, the user selects the other button and enters the server’s name. This action connects the user to the specified news server, sends the user-name to the news server, and displays a screen requesting a news password.

This password (which is not the UNIX password) allows the user access to the news server. The user is then allowed access to the news server.

- Step 1. Select a News Server.

Step 2. Enter a newsgroup password—do not enter your UNIX login password. If you need a password, contact the news administrator for the server. If you do not know how to reach them, try sending e-mail to user news at the desired news server.

NOTE: To connect without a password, press <return> leaving the password field blank.

To enter a newsgroup:

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|---------|---|
| Step 1. | Double-Click the appropriate newsreader icon. |
| Step 2. | Select the server to which you wish to connect. |
| Step 3. | Enter news password. |

3.1.2 Entering a Newsgroup. Once the correct password is entered and the news server has accepted the connection, then a new window is displayed (see Figure 3-3). At this point, both xrn and tin give the user the option of subscribing to new newsgroups (i.e., newsgroups which were created since the last time the user read news).

NOTE: The user is only presented with newsgroups that will allow access (i.e., no newsgroups are displayed to which the server will then deny access).

The newsgroups to which the user is subscribed are displayed with the number of articles in each newsgroup that the user has not yet read. At this point, the user can perform “normal” newsreading functions. First-time news users should view all newsgroups (All Groups button for xrn, <y> for Tin), select newsgroups to subscribe to, and then rescan the newsgroups (rescan button for xrn, <Y> for Tin).

3.2 Performing Specific Tasks within Newsgroups

3.2.1 How to read news. Both xrn and tin allow a user to select a news group from the screen listing available newsgroups. To read news:

- Step 1. Select a new group from the news groups listed on the screen.
- Step 2. Use the up and down arrow keys to move the cursor from one newsgroup to another. (Xrn also supports the Next and Prev buttons; tin supports the vi movement keys <j> and <k> for down and up, respectively.
- Step 3. Press the Read button in xrn or <tab> in tin to read the first unread article in the newsgroup.

The article begins with a header, which contains information that can be useful to the reader. The header begins with the “Path:” line and ends with the “X-Newsreader” line. The path indicates the sender and the series of news servers through which the article passed to arrive at the local server. The “Newsgroup:” line identifies the newsgroup in which the article resides. Below the “X-Newsreader” line is the text of the message. Text is limited to the comment “another test.” This particular example includes a signature that was automatically appended to the article. To include a signature automatically, it is necessary to have a *.signature* file in the user’s home directory.

3.2.2 What is a Thread. Newsgroup conversations are created by people responding to articles previously posted to the newsgroup. In News, a conversation is called a “thread” (as in the thread of a conversation). A thread is identified by the subject line of a news article—articles with the same subject line (possibly preceded by the string “RE:”) are part of the same thread. Both xrn and tin support “threading” by grouping articles within a newsgroup on the basis of their subject line.

3.2.3 How to Post an Article. In xrn, the Post button brings the user into a text editor with an article skeleton (see Figure 3-4). In tin, pressing <w> does the same. The article skeleton is a partially-completed header and, if the user has a signature file (*.signature*) in their home directory, it has the user's signature. For an article to be successfully posted, it must have valid "Newsgroups:" and "Subject:" headers. (Tin prompts the user for a subject line before opening the editor, and both xrn and tin will fill in the newsgroups if the user is posting from within a newsgroup.) The body of the article can be composed in the text editor, or the user may include a previously-composed text file. Once the user is satisfied that the article is complete, it can be posted. In xrn, this is done by pressing the Send button at the bottom of the edit window. In tin, this is done by saving the file and exiting the editor (if the editor is vi, the command is ":wq"—see Subsection 3.2.6 if you do not wish to use vi).

3.2.4 How to Post a Followup to an Article. A followup is an article posted in response to another article—followups are the basis for threading. Both xrn and tin support posting followups.

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|---------|--|
| Step 1. | While reading an article, press the Followup button (xrn) or <F> (tin) to post an article with the same subject line as the article currently being read. |
| Step 2. | If you want to include the text of the previous article in the followup, press the Include Article button (xrn). In tin, press <f> (instead of <F>) to include some of the text from the original article. (Edit the included text to minimize repetition and maximize clarity.) |
| Step 3. | Once the article is complete, it can be posted. In xrn, post an article by pressing the Send button at the bottom of the edit window. In tin, an article is posted when you save the file and exit the editor. See Subsection 3.2.6 to use an editor other than vi. |

3.2.5 How to Send E-mail to an Article's Author. Both xrn and tin

support composing and sending an e-mail message to the author of an article. The process is similar to following up a posting (see Subsection 3.2.4). To send e-mail:

- | | |
|---------|---|
| Step 1. | Read the message. |
| Step 2. | Press the Reply button (xrn), or <R> or <r> (tin). The newsreader program fills in the “To:” header of the e-mail message based on the header of the article to which the user is replying. |
| Step 3. | Modify the “To:” line or add a “cc:” line to send the response to any address or addresses. |

NOTE: Xrn supports simultaneously following up and replying to an article. This feature will be added to tin in a future release.

3.2.6 How to Specify the Editor to use for Posting Articles. The default editor for tin is vi. The system administrator can change the editor by modifying the environment variable \$VISUAL to name the desired editor. For example, to make Open Windows Text Editor the default editor:

- Using the c-shell:

```
setenv VISUAL
/usr/openwin/bin/textedit
```

- Using either the Bourne shell or the Korn shell:

```
set VISUAL
/usr/openwin/bin/textedit
export VISUAL
```

- Edit the file `~/tin/tinrc` and change the line:

```
default_editor_format: %E+%N %F
```

to

```
default_editor_format: %E %F
```

3.2.7 How to Subscribe to a Newsgroup. When `xrn` or `tin` is called, the program checks to see if there are any new newsgroups that were created since the last time the user read news. If new newsgroups exist, the user has the option to subscribe to them. In addition, both programs allow users to subscribe or unsubscribe to newsgroups while working in the newsgroups window.

- Step 1. Press All Groups (`xrn`) to display a list of all available newsgroups; press `<y>` (`tin`) for all available newsgroups.
- Step 2. In `xrn` there are subscribe and unsubscribe options. In `tin` press `<s>` to subscribe and `<u>` to unsubscribe to any newsgroups.

3.2.8 How to be Given Access to a News Server or to a Newsgroup. Contact the news administrator of the server in question to be given access to newsgroups on that server. If you are given a point of contact (POC) for a particular newsgroup, then contact the POC directly rather than sending e-mail to a news administrator.

When the news server software is installed on a machine, an e-mail alias is created on that machine for the user news. For example, if the news server is installed on `delphi.forscom.smil.mil`, then e-mail sent to `news@delphi.forscom.smil.mil` will be automatically forwarded to the news administrators at FORSCOM.

3.2.9 How to Cancel an Article. News supports the ability to cancel (un-post) articles. You can only cancel an article that you posted, and you can only do it when connected to the same server on which you

posted the article.

- | | |
|---------|---|
| Step 1. | Read the article you want to cancel. |
| Step 2. | Press the Cancel button (xrn) or press <D> (tin). |

NOTE: These steps will remove the article from the GCCS News network; however, some people may have already had the opportunity to read it.

3.2.10 How to Specify the Lifespan of an Article. An article posted to News is not available indefinitely for reading. Eventually, a news server will "expire" the article, removing it from the server. As part of its configuration, each server has a minimum, a maximum, and a default lifespan for articles. This configuration is on a per-server and per-newsgroup basis. There will be times when a user posting an article will want to specify a lifespan for an article that may differ from the lifespan specified on the server(s). For example, if the article refers to an event happening on a specific day, the user may wish for the article to expire on that day (i.e., to not be expired before that day, and to not be available for reading after that day).

- | | |
|---------|--|
| Step 1. | Insert an "Expires:" header (i.e., above the empty line above the article's body) the order of the headers does not matter). The line looks like "Expires: <i>date</i> ," where <i>date</i> is either an absolute date such as "8/14/95" or "14 Aug 1995" or a relative date and time such as "3 days" or "4 weeks." |
| Step 2. | Post the article. |

3.2.11 How to Search for a Specific Article. Currently you can search on an article subject or author. Searches are not case sensitive and will match sub-strings. Xrn provides Search Subject and Search Author buttons. Tin supports searching forward and backwards on subject (</> and <?>) and for author (<a> and <A>).

NOTE: The capability to search for an article based upon an author+newsgroup+date+time specification, where date+time are the "Date: " header of the article (i.e., when the article was first published) will be available in a future version.

3.2.12 How to Locate an Article That No Longer Exists on your Server. News articles are not usually posted on a news server indefinitely (your news administrator can make exceptions). However, your site may be archiving the newsgroup in which the article you are searching for was posted. If an article was archived, your news administrator should be able to retrieve it for you.

NOTE: A news-archive reader will be available in a future GCCS Teleconferencing application suite. When it is available, you will be able to use your web browser (either Mosaic or Netscape) to access your or another site's news archive.

“How to” Steps for TLCF (CHATTER):

This is an extract from Section 2.0 of the Teleconferencing User's Manual. The format has been left as it generally appears in the aforementioned document, (i.e., paragraph numbering remains).

2.0 INTERNET RELAY CHAT

Internet Relay Chat (IRC) is a chatter-style program that allows multiple users to participate in conferences. It is implemented as a network of IRC servers. Users interact with IRC via IRC clients. There are two clients available to users: a low bandwidth text-based client, named *irc*, and a Graphical User Interface (GUI) client, named *Zircon*. The user invokes an IRC client and directs the client to connect to a local server. Once connected, the user participates in conferences or conversations by joining a channel (conference). Once the user joins a channel, the user then receives all messages sent to that channel. When the user inputs a message to the channel, the message is forwarded to all other clients on the same channel (including clients attached to other servers in the IRC network) at that time.

NOTE: The program uses the term channel extensively. For our purposes, a channel is the same as a conference.

The multiple servers operate as a virtual server. This means that once a user is connected to a server, usually a local server, he has access to all the channels for which he has permission, throughout the system, regardless of where they were initiated. A user can open a channel on his IRC server and converse with a user on that channel even though the other user may be connected to another IRC server in another command center.

IRC is non-persistent in that messages are not automatically saved. It is also very interactive. When a user types a message on the screen, it is very quickly transmitted to all other users currently connected to that conference. However, when a message is sent while a user is not connected, that user cannot see that message. IRC supports the following features:

- Private channels) users not on the channel cannot see who is on the channel.
- Secret channels) users not on the channel cannot detect that the channel exists.
- Keyed channels) users must know a password to join the channel.
- Invitation-only channels) a channel operator must send a user an invitation before the user can join the channel.
- Moderated channels) channel operators can provide or remove permission to individuals to input messages to the conference.

2.1 Overview of Zircon

Zircon is an X-based package that provides a GUI interface to IRC. A text-based client program for IRC called `irc` is also supplied, but no button for it is displayed on the desktop. Zircon supports the following features:

- Side-bar conversations) two-way conversations invisible to others.
- Pop-up channel displays) iconified channel windows will restore themselves when a message arrives on the channel.
- Queries) to the identity of other users.

When the user double-clicks on the zircon button, the program Zircon automatically connects to the local IRC server and the windows that comprise the Zircon user interface appear on the screen. At that point the user can get a listing of the channels (conferences) which currently

exist in the GCCS IRC network, send a message or hold a conversation with another user who is running an IRC client, or join a channel. By joining a channel, the user is participating in a conference. This Section describes Zircon functionality and provides how-to documentation for the specific tasks to execute within Zircon.

2.2 Zircon Functionality

2.2.1 Types of Users. The GCCS Teleconferencing users are similar to WIN Teleconferencing users. There are three types of GCCS Teleconferencing users: chairman, alternate chairman, and participant. The responsibility and role of each user remains unchanged from the WIN Teleconferencing.

2.2.1.1 Chairman. The chairman initiates a conference. There should be only one active chairman for each conference, and the chairman manages the conference. The GCCS Teleconferencing conference chairman should be the designated channel operator. Only the channel operator can control a channel. The conference chairperson should create the channel several hours before the conference is scheduled to begin.

NOTE: If a conference is scheduled to begin at 0900 hours, and one of the conferees joins the conference at 0855 (before it is created), that user will be the channel operator (i.e., that user will have controlling privileges over the channel).

The chairman plans the conference, disseminates administrative requirements to conference participants, determines conference participants, controls the flow of information, determines the conference ending (or when a conference needs to reconvene) designates the alternate chairman, and determines the conference archival requirements.

NOTE: Number of GCCS Teleconferencing Users. There is no documented limit to the number of GCCS Teleconference users. However, it is recommended that GCCS Teleconference participants be limited to 10 active participants (participants involved in conversation). However, there may be any number of passive participants (listeners) on a given channel.

2.2.1.2 Alternate Chairman. The alternate chairman may reconvene the conference in the absence of the chairman.

2.2.1.3 Participant. A participant is a GCCS Teleconferencing user that has been given the administrative requirements to join the GCCS Teleconferencing by the Chairman or Alternate Chairman.

2.2.2 GCCS Basic Teleconferencing Functions. The IRC/ZIRCON icon is used to start the news client function.

2.2.2.1 How to Start Zircon.

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|---------|--|
| Step 1. | At a GCCS workstation, locate the system Launch Window menu on the desktop screen. |
| Step 2. | Locate and double-click the <i>IRC/Zircon</i> icon. |

The Zircon control panel is displayed and then the Zircon Information Window is displayed on top of the Zircon Control Panel.

The Zircon Information Window is where routine messages that are not part of a specific channel are sent (e.g., Message of the Day and various errors). The user can divert other messages to this window by setting various configuration options if you do not want to see them as pop-up windows.

Separate the Zircon Information Window screen from the Zircon Control Panel screen by clicking on the title bar of the Zircon Information Window and, while holding down the left mouse button,

drag the window onto an open area on the screen. This newly uncovered window is the Zircon Control Panel, which provides a set of buttons and menus that are used to control the teleconferencing session.

Configure	Allows the user to configure a nickname, IRC name, and server lists.
Zircon Version x.x.x	Displays the Zircon version number including “tcl” and “tk.”
Register	Disabled for the SIPRNET use. There is no requirement to register on the SIPRNET.
Help	Displays a dialog asking for topics. No HELP service is available on the SIPRNET.
Busy	Indicates you are busy (or not busy).
Invisible, Wallop, SrvMsg	Indicates you are invisible to receive Wallops and Server messages.
IRC Op	Enable only when you are an IRC Operator. (Not the same as channel operator). Operators have special privileges for connecting and reconfiguring IRC networks. This capability should be unavailable to users.
Nickname	The menu from this button has your nicknames on it. Select one and it will be sent to IRC. By default the first item in the list is chosen by Zircon as your initial nickname.
IRC Name	Your IRC NAME should always be your full name. Changes will only take place on a server change.
Server	A list of servers to which you normally connect. The first one in the list is chosen by Zircon as the server to connect to when Zircon is initially run. It will be your local server.

Away	This menu contains your away messages. When you are away this button is lit.
BRB	Clicking this button sends the message BRB (be right back) to all the channels you are currently on, notifying them that you will be absent for a short while.
Friends	Clicking this brings up the Friends window, which has buttons for all the users you chose to have in your User Info variable. You configure this list in the People panel.
Quit	Quit IRC. You will be prompted to confirm the quit and to enter a new sign off message. The default action is to <u>not</u> save the file.
Servers	A menu that allows the user to perform various IRC server operations, such as connect your server to another server (if you have operator privileges) or identify which servers are connected to the network.
Users	Allows the user to perform various IRC user operations.
Channels	A menu that allows the user to perform various IRC channel operations. Also on this menu are the names of channels you asked to be put here. Selecting one of those will join that channel.
Services	This menu provides access to various IRC service providers. Currently nickserv and noteserv are there by default, and you can add your own by setting the services variable in your rc file.

Channel This entry is where you can type in the name of a channel you wish to join. Type here, hit return and a window will pop up, assuming you are allowed access to the channel. All channel names begin with # to denote global channels or with & indicating local (to your server) channels.

2.3 How to Accomplish Common Tasks Within Zircon

2.3.1 Finding and Entering an Existing Channel. There are two ways to enter an existing channel: enter the channel name in the Channels block, or select the channel name from the list of available channels. The first method allows you to join a channel when you are sure of its name. The second method allows you to search through a menu of channel names and select the appropriate channel. To enter the channel name:

- | | |
|---------|--|
| Step 1. | Go to the Zircon Control Panel and select the <i>Blank Field</i> button to the right of the Channel button (see Figure 2-2). |
| Step 2. | Enter Conference name (i.e., <i>#chan_x</i>) then press <return>. |

If you are not allowed to join the channel, you will be so informed. If the channel does not currently exist, it will be created. When you join a channel, a new window is displayed on the screen with the channel name as its title. To select the channel from a list:

Step 1.	Click the <i>Channels</i> button and select <i>List</i> from the menu, which displays a new window.
Step 2.	Click on the <i>List</i> button at the bottom of the window to list the available channels.
	NOTE: At the top of this window is a threshold control and filters to limit the newsgroups that are listed. To list all visible newsgroups, set the threshold to one and leave the filters blank. To list all channels whose names contain the string “forscom”, specify “.*forscom.*” in the channels filter.
Step 3.	Double-click the desired channel.
Step 4.	To update the channels listing, click the <i>List</i> button again.

2.3.2 How to Create a Channel (Start a Conference). A new channel is created by joining a channel that does not already exist.

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|---------|---|
| Step 1. | Go to the Zircon Control Panel and select the <i>Blank Field</i> button to the right of the Channel button. |
| Step 2. | Enter Conference name (i.e., # <i>chan_x</i>) then press <return>. Local channel names beginning with “&” and global channel names beginning with “#.” |

NOTE: The conference or channel name entered becomes the channel's title.

See Subsection 2.3.2.1 for information on naming a channel. When the new channel is created you are its operator and sole member. Users who subsequently join the channel cannot be channel operators unless you or another channel operator make them one by selecting the user's button and choosing ChanOp.

NOTE: There is no difference between the original channel operator and a newly created channel operator; and channel operators can remove operator status from each other. Users who subsequently join the channel will not be channel operators unless you or another channel operator make them so.

Channel operators are the only users who have control privileges for the channel. It is strongly recommended that a user who schedules a conference create the channel several hours before the conference is to begin. If the channel is not created early, and another user logs on, that user becomes the channel operator. For example, if you schedule a conference to begin at 0900 hours, and one of the conferees joins the conference at 0855 (before you have created it), that user will be the channel operator (i.e., they will have controlling privileges over the channel). Creating the channel in advance allows time to

negotiate a solution if a channel already exists with the same name that you planned on using for your conference channel.

If you do not wish any IRC users to join or be aware of the conference before 0900, change the mode of the channel to “Secret” and “Invite Only” when it is created (see Subsection 2.3.4). At 0900 hours, change the channel such that the users you wish to be in the conference can join.

2.3.2.1 Local Versus Global Channels. IRC operates as a network of servers. A local channel is one that can be accessed only by users attached to the server on which the channel is created. A global channel is one that can be accessed only by users on any server in the network. A channel name that begins with a “&” is a local channel; a channel that begins with “#” is a global channel. Creating a local channel allows the operator to use the access restrictions of the server itself, which is often configured to only allow “local” connections (clients within the same site).

Once an acceptable channel is named the IRC Channel window is displayed. This window is the center for teleconferencing. Conversations between two or more GCCS users are held within this channel window. See Subsection 2.3.4 for a description of each button on the channel window display.

2.3.3 Interacting with a Channel. All interaction with a channel can be done through the channel window. Messages from other users on the channel are automatically displayed in the window—each line of text is labeled on the left margin with the nickname of the user who sent it.

Entering text into a channel:

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|---------|---|
| Step 1. | Enter text in the field at the bottom of the IRC Channel window. As you enter text, the characters you type appear at the bottom of the window. You may edit this text with the left and right arrow keys, the backspace key and the delete key. |
| Step 2. | To broadcast your message to the channel, press <enter>. (You will see your input labeled with a ">" on your screen; other users will see the text labeled with your nickname.) Your message is displayed in the IRC Channel window of users participating in the conference. |

2.3.3.1 Displaying the Users in a Conference. The Names menu at the top of a conference window contains items that allow the user to perform actions related to specific users. To display users in a conference:

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|---------|---|
| Step 1. | Select the Names button on the IRC Channel window. |
| Step 2. | Select Buttons to display a column of Names. The nicknames of the conference participants are displayed as buttons on the right side of the window. (Note the location of the name "Greg".) |

To remove the list of names displayed on the right side window:

- | | |
|---------|--|
| Step 1. | Select the Names button on the IRC Channel window. |
| Step 2. | Select the No Buttons option. |

2.3.3.2 How to Find the User Behind the Nickname. Under IRC in general, and Zircon in particular, a user's actions are identified by a nickname. However, nicknames are restricted to nine characters or less (and thus are not always fully descriptive), and users are capable of

setting or changing their nickname at any point. To determine the user name of a conferee:

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|---------|---|
| Step 1. | Select the Users button from the names displayed on the screen; or select a user's menu entry from the Names menu. |
| Step 2. | A menu is displayed that lists actions that may be performed upon that user. Select Whois. |
| Step 3. | The Whois dialog box is displayed. Enter the nickname in the appropriate entry space. The user's login (<username@machine.domain>), the user's name (as entered by the user —an unsecure item), and a list of the other IRC conferences the user is currently a member of is displayed. |

There is also a menu item labeled “Finger,” which will attempt to query the finger daemon on the user's machine; this will fail in a secure environment (the finger daemon should not be executed on a secure machine).

2.3.3.3 Holding a Sidebar Conversation. IRC supports one-on-one conversations, as well as channels. A sidebar conversation under Zircon can be with another person in the conference or with a user on the GCCS IRC network who is not participating in the conference. Starting a sidebar conversation displays a new window on the screen. This window is functionally identical to a channel window, but its default size is smaller than a channel window and it is titled with the user's nickname. Typing a message into this window and pressing <CR> displays a sidebar window on that user's terminal (titled with your nickname). You and this user can then hold a private

conversation using these windows. To hold a sidebar conversation with a user currently in your conference:

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|---------|--|
| Step 1. | Identify the nickname of the person with whom you wish to have a sidebar conversation (displayed on right side of IRC Channel window). |
| Step 2. | Select the Names button. |
| Step 3. | Select the Users button from the Names menu. |
| Step 4. | Select Msg button from the User menu. |
| Step 5. | A dialog box is displayed. Enter the nickname in the appropriate space. |

To hold a sidebar conversation with a user not currently in your conference:

- | | |
|---------|---|
| Step 1. | Select the Users button on the Zircon Information Window. |
| Step 2. | Select Msg button from Users menu. |
| Step 3. | A dialog box is displayed. Enter the nickname in the appropriate space. |

NOTE: If there is no user with the specified nickname on the GCCS IRC network, this will be indicated after you attempt to send a message to the user.

2.3.3.4 Leaving a Conference. Leaving a conference is the same as leaving a channel.

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|---------|---|
| Step 1. | Select the Leave button at the top of the IRC Channel window. This will take you back to the Zircon Control Panel window. |
| Step 2. | Select the Quit button on the Zircon Control Panel window. |

Leaving the Zircon Control Panel terminates IRC and takes you back to the desktop launch window.

NOTE: A channel operator (or chairman) should remain on the channel until all others leave the channel to ensure that the conference will close. The channel operator (or chairman) should be the individual responsible for ending a conference.

2.3.4 Controlling Access to a Channel. By default, when a new channel is created, any user can join the channel. Often, this is not acceptable and the user creating a conference will need to restrict access to the conference. The IRC Channel window can be used to limit access to a conference.

Table 2-1 describes the ways that access to a channel can be restricted. These mechanisms can be combined to create more stringent restrictions. Table 2-2 describes the functions available on the Mode menu.

Table 2-1. Restricting Channel Access

Channel Access	Location and Action
Local Channel	Create a channel whose name begins with “&” instead of “#,” to limit the conference to users attached to the same server that the channel was created on. This utilizes the access restrictions of the server itself, which is often configured to only allow “local” connections (clients within the same site).
Secret Mode	The Secret command is under the Mode button on the channel window. Select Secret to put the channel into secret mode. Users listing the available channels will not see this channel, even if they have permission to join the channel.

Channel Access	Location and Action
Invite Only	<p>The “Invite Only” command is under the Mode button on the channel window. Select Invite Only to allow users to join the channel only if an operator of the channel invites them.</p> <p>To invite a user, press the Channel button on the channel window and select Invite. A dialog box prompts for a user (nickname) and a channel (the current channel is the default). Enter the nickname, click OK and the user is presented with a dialog box asking if they wish to join the channel. Invitations are for immediate use only—if a user with the given nickname is not on the network or if the user declines to join the channel, then the invitation goes away. Further, if the user joins the channel and then leaves the channel, he or she will require a new invitation to re-join. This is an unwieldy, but effective mechanism if you want to have a large number of users on the conference.</p>
Keyed Channel	<p>The Key command is under the Mode button on the channel window. Selecting this displays a dialog box that allows the user to enter a key (which is equivalent to a password) to the channel. Once this is established, other users attempting to join the channel must enter the same key. The Key command can only be executed by a channel operator. Note that, when the key is set or changed, all users already on the channel will be notified of the new key value.</p>

Channel Access	Location and Action
Encrypted Channel	The Crypt command is under the Channel button on the channel window. Selecting this displays a dialog box that allows the user to enter an encryption key (a string of characters). Once established, all text entered by the user into this channel is encrypted with this key; and all text arriving on this channel is decrypted with this key. Any user can enter this command, and only that user's I/O to that channel is effected. This is only useful if multiple users enter the same encryption key. The encryption mechanism is not DOD-certified.
Limits	The Limit command is under the Mode button on the channel window. Selecting this displays a dialog box that allows you to limit the total number of users on the channel. This can only be done by a channel operator.

Table 2-2. Channel Functions

Button	Action
Pop Up	Activating this button allows the user to minimize the window because it will cause the IRC Channel window to pop up when anything has been entered into the channel by another user.
Pop Down	Not Implemented.
Draw	Turns on whiteboard) not recommended for use.
Jump	If activated, causes cursor to return to point of new text.
Quiet	Turns bell off.

Button	Action
Actions	Modifies <username> to *username on other users' channel windows. Modifies > to *username on user's own channel window.
Ban	This button bans a selected user from the channel. It is not expected to be used in GCCS.
Topic	A topic is a small amount of text that describes the conference. When this button is activated, only the operator may change the topic.
No Msg	Not implemented.

2.3.5 How to Leave a Channel. Leaving a channel is the same as leaving a conference.

Step 1.	Select the Leave button on the IRC Channel window.
Step 2.	Answer yes to the exit dialog box.

2.3.6 How to Log a GCCS Teleconferencing Session (save to log file). Once the log file is open, all conversations will be recorded. After the conference, the log can be edited (using vi or any other available editor) and printed out from an X-Terminal window.

From the IRC Channel window:

Step 1.	Select the Channel button.
Step 2.	Select Log from the Channel menu.
Step 3.	Select Open from the Log menu.
Step 4.	Specify the name of the log file.
Step 5.	Select ok

2.3.7 How to Close a Channel. A channel ceases to exist when there are no longer any users on the channel. Thus, to close a channel, everybody leaves it (selects the *Leave* button from the top of the channel window). A channel operator should remain on the channel until all other users leave the channel to ensure that the conference will, indeed, close. If a user remains on the channel (perhaps they walked away from their terminal without leaving the channel), the operator can select the user's button, choose *Kick*, and then kick the user off the channel with a polite message informing them that the conference is over. If there is no operator on a channel, the channel can still be closed by having an IRC operator "kill" the user(s) on the channel (from the user's button on the channel window select *Kill*). Note that an IRC operator's "Kill" completely disconnects the user from whatever IRC server they are attached to. This should only be done under extreme circumstances.

The channel operator (conference chairman) is responsible for ending a conference. To close a channel:

- | | |
|---------|--|
| Step 1. | Select the Mode button the IRC Channel window:. |
| Step 2. | Toggle the Invite Only selection to on (square is darkened). This ensures that no new participants will join the conference. |
| Step 3. | Using the text entry area at the bottom of the window inform all users that the conference is over. |
| Step 4. | Once all users are off the channel, select the Leave button on the IRC Channel window. |

If a user(s) remains on the channel, the operator may remove a user(s) by highlighting the remaining user(s) name on the IRC Channel window, selecting the Kick entry on the menu. Only the channel operator can do this.